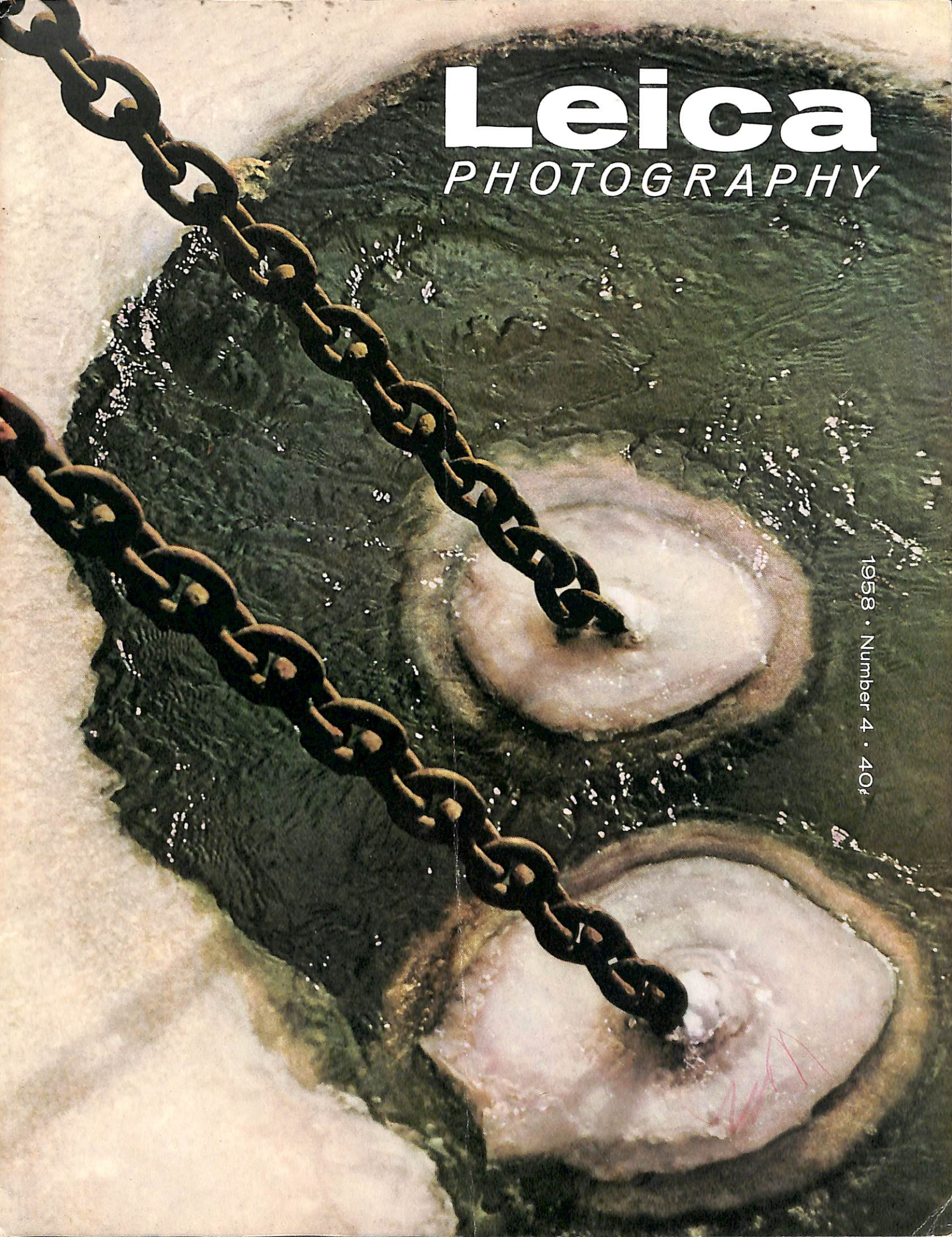
Leica PHOTOGRAPHY



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Leica PHOTOGRAPHY

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contents:

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The editors are happy to consider original articles on photography with the Leica and photographs taken with Leica cameras and lenses. All manuscripts and photographs should be accompanied by stamped, self-addressed return labels.

COVER

M. J. Schmidt

This strong wintry composition was made by photographer Schmidt at Wilmette harbor on Lake Michigan, with daylight Kodachrome. Schmidt, who titles his picture of anchor chains "Iced In," poked the 90mm Elmar lens on his IIIf through a wire fence and used an exposure of 1/25 second at f/5.6, handheld.

INSIDE COVER

Sid Kaplan

The "winterized" New York City traffic light was photographed with Leica M 3 and 50mm Summicron. Exposure was 1/50 second at f/5.6 on Plus-X, which was developed in Harvey's 777. Note that winter moods have been captured strongly through isolation of detail, in this inside cover, in the cover picture, and in the Leica portfolio photograph on p. 22.

one-man show

JOACHIM SCHUPPE, photojournalist

Appearing here from time to time: selections from the finest work of photographers in different fields.

On the job, starting his thirteenth year as a press photographer, Joachim Schuppe is busy using 35mm to shoot everything from rush news to sports and photo feature stories. On his own time, he keeps cameras active, constantly exploring still other avenues such as portraiture.

Gathered here for the first time in a published collection are both his workday and off-hours photography, which overlap in revealing a top technical skill, a refined taste and a sharp, mature eye for composition. Schuppe is a craftsman as demanding and critical of his own pictures as of others; he is a newsman extending his skills into the realm of art.

"Joe" Schuppe was born in Berlin, Germany, in 1921. His father, a photographer, presented him with a new Leica "Standard" when Schuppe was twelve years old. At fifteen he began work as an apprentice in industrial and advertising photography at the Telefunken factory. He remembers his first task, retouching backgrounds on industrial photo negatives. In three years, he worked himself up to camera operator and became a photographer at Junkers for a while. Then he was caught up in World War II as a German soldier.

John L. Lewis as liner United States docks without tugs during strike. IIIf, 35mm Summaron, 1/25 second at f/22 on Tri-X.

Brooklyn fire. IIIf, 135mm Hektor.

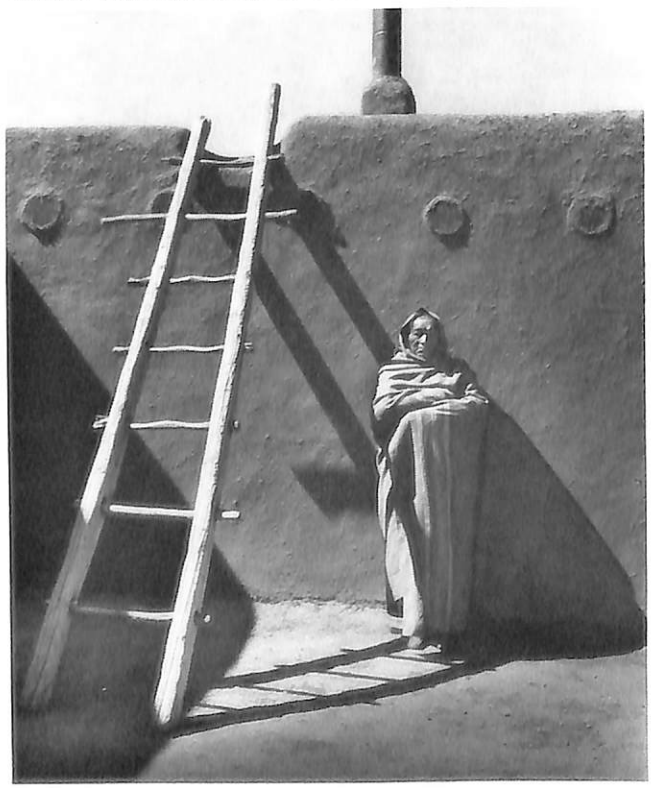
Ship arrival. British boy at New York pier before leaving for Canada. IIIf, 35mm Summaron.

After the war, Schuppe began his journalistic career working for a small picture agency in West Berlin from 1946 to early 1947, and then free-lancing for a half-year. During this time he worked only with Leica equipment. In September, 1947, he went to work for the West Berlin bureau of Acme Newspictures. Ironically, one of his reasons was the desire to gain experience with 4 x 5 press cameras. Three years later, after brilliant coverage of the Berlin airlift and the beginning of the cold war, he was invited to join Acme's New York bureau where he has been ever since. (Acme became United Press Newspictures and is now United Press International.)

Although Schuppe used his Leicas for personal photography, he was confined to larger cameras on the job, using 35mm at work only intermittently until about two years ago. At that time, under the leadership of UPI's top picture editor Harold Blumenfeld, the newspicture service embraced 35mm. Men such as Milt Freier in the Washington bureau (See *Leica Photography*, No. 3, 1958) and Art Rickerby in the New York bureau were showing what could be done with the versatile small cameras. Blumenfeld knew Schuppe's talents and soon the longtime "35 man" was returned to his favorite cameras full time. Schuppe is one of the many UPI staffers

City skyline merging with cemetery. IIIf, 135mm Hektor.

Indian and ladder. New Mexico. IIIf, 35mm Summaron.



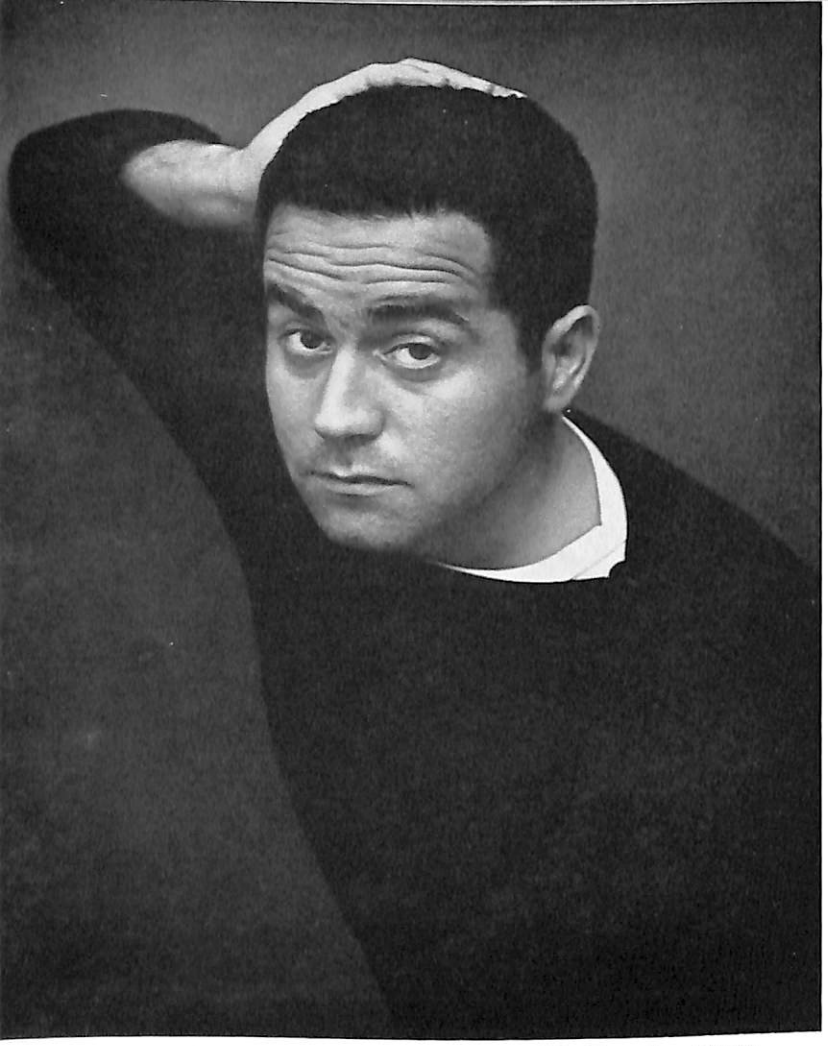
one-man show *(contd.)*

who now carry nothing but 35mm equipment. He uses three IIIf bodies, Leitz lenses from the 28mm Summaron to the 135mm Hektor, and Visoflex. He says, "I believe the 35mm camera will finally be the only one used in news work."

On assignment, a photographer from UPI is, in effect, a staff photographer for newspapers all over the country, indeed, all over the world. Some of these outlying papers also subscribe to a competition service and these papers are watched closely by the rival services to see whose picture is chosen. In a big city, this competition is intensified. For instance, the New York City newspaper editor often has a choice, on a given story, among the photos made not only by the picture services, but also by his own top-notch staffers, and often, a photo from a public relations photographer sent to the scene by an interested party.

In this competitive atmosphere, when the bureau man's picture is used, it's a professional compliment. Joe Schuppe has had his share of these compliments, including the highest approval, front-page placement. For example, his photo of union leader John L. Lewis inconvenienced by a dock strike was a front-pager when, within the space of one week, Schuppe had two other front-page pictures in New York City dailies alone. All were shot with Leicas.

Girl with leaf on porch of antique shop. Bucks County, Pennsylvania. IIIf, 35mm Summaron.



Informal portrait. Daylight. IIIf, 50mm Summicron.

Ruth. Bounced photofloods, white panel reflector at camera. Vignetted in printing. IIIf, 135mm Hektor, Visoflex.

Wally, the photographer's wife. Printed on contrasty paper "to isolate major features." Extreme enlargement, from negative made with 28mm lens.

one-man show *(contd.)*

Janet. Bounced photofloods with white panel reflector at camera. Straight print. IIIf, 135mm Hektor, Visoflex.

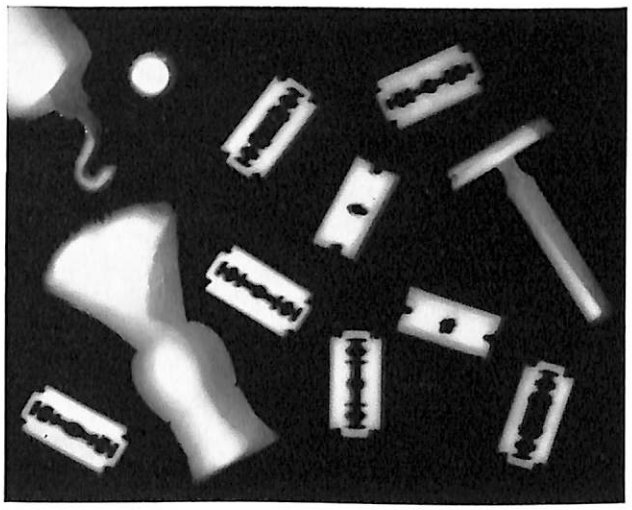
darkroom discoveries / *S. David Scher*

tricks in the lab

Webster's dictionary defines *photography* as "the art or process of producing images on sensitized surfaces by the action of light or, more generally, of any form of radiant energy." This means that photography can take place in the darkroom, especially for the photographer with an inclination for new experiments.

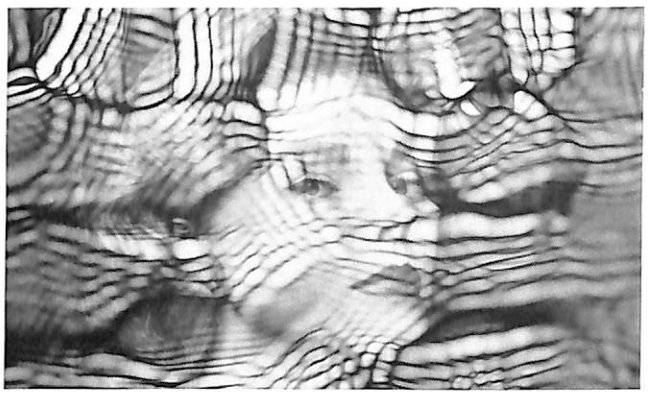
There is enough genuine excitement in photograms and related techniques to warrant some serious tries by the uninitiated.

If the weather is preventing you from being creative with the camera for a while—then let the darkroom be your studio for some of the most unusual challenges in photography.



the basic photogram

The challenge of the photogram lies in the chance to exercise a feeling for composition. Starting with the thought of simple silhouettes—a white outline in a dark field, or vice-versa—objects are placed on the paper—either enlarging or contact type—in arrangements to suit your own ideas of abstract storytelling or impressionistic art; then the paper is exposed by the enlarger light or any auxiliary light long enough to produce true blacks in normal development. You can achieve sensations of depth and perspective by varying the position of the light source. A 15-watt white bulb (bare or in a reflector) held 10 to 30 inches away from the paper at different angles produces dramatic shadow shapes. Flare, halo, and highlight effects are possible with crumpled cellophane, glassware, beads.

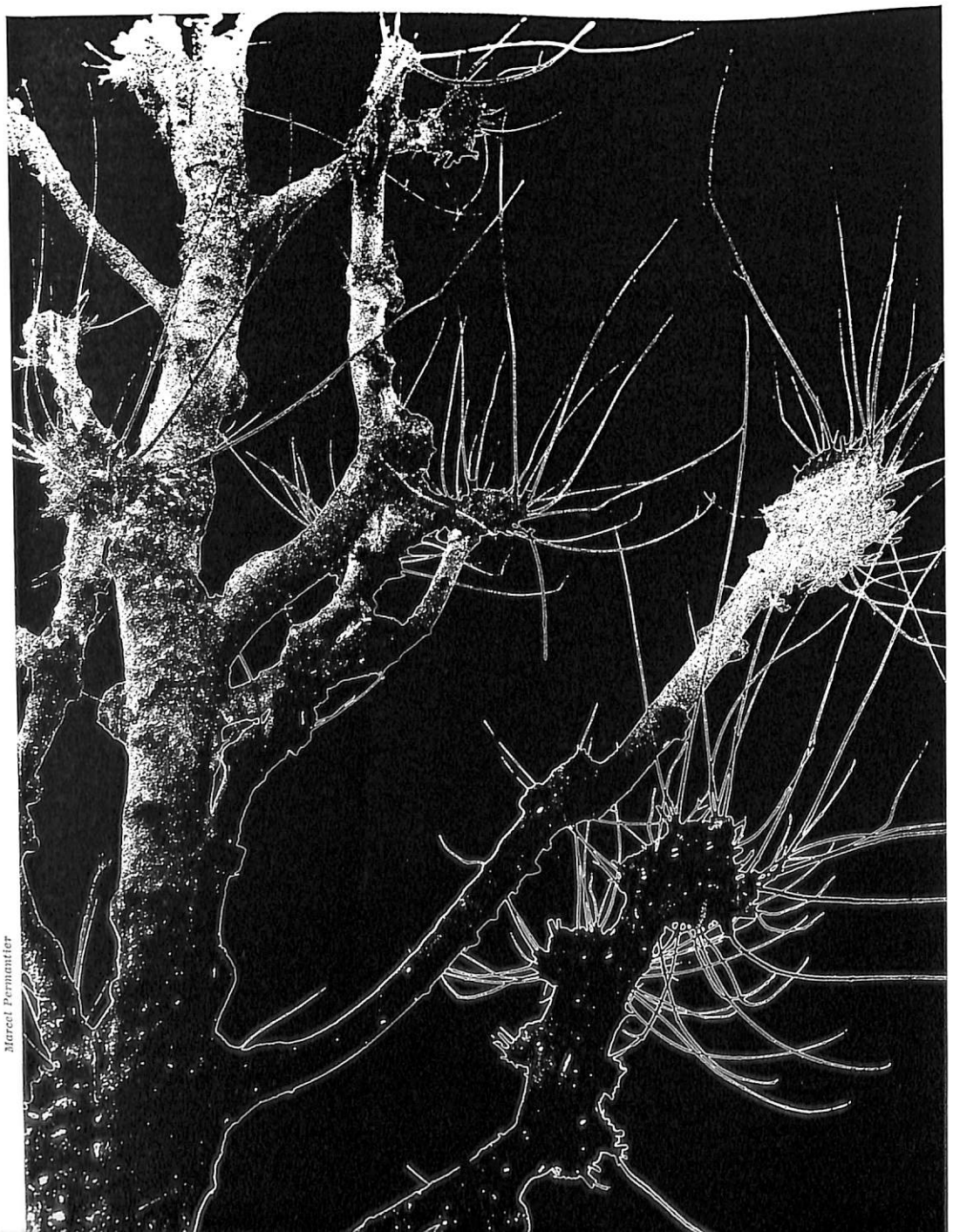


liquid designs

"Action photograms," in a sense, are light-and-shadow impressions of actual liquids. In making the accompanying illustrations, a sheet of contact printing paper was placed in a darkroom tray half-filled with water, and the tray positioned on the enlarger easel (protected by a folded towel). An electronic flash head was put above the lens in place of the enlarger light housing. Small light leaks, where the strobe reflector rim did not seat exactly on the enlarger flange, had no fog effect. But you should check against such leaks by improvising cardboard adapters and using masking tape where necessary. The basic "shot" is accomplished as follows—agitate the water by rocking the tray for a few seconds (jarring it sharply heightens turbulence for an interesting effect)—then fire the strobe. Close timing is important. A companion might assist on this. Use the strobe behind a negative in the carrier—portraits and scenics produce unique results.

solarization

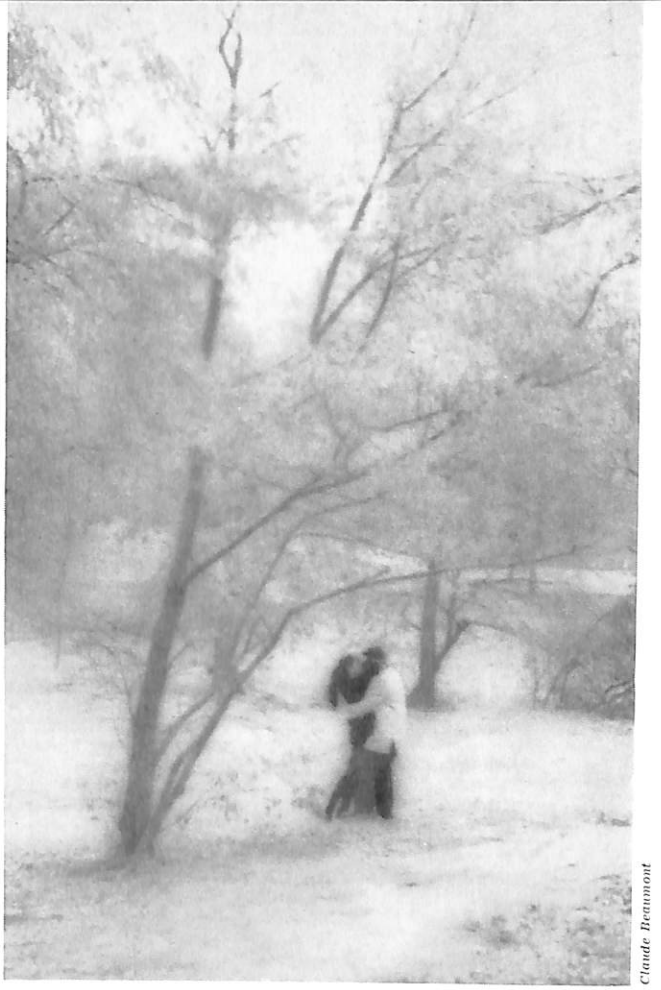
Among the most complex, and therefore most challenging darkroom experiments, is this phenomenon which occurs when light strikes a partly developed negative and causes various degrees of tone reversal. Subject matter is up to you, and the darkroom experiment should proceed as follows: FIRST, AND VERY IMPORTANT—do not experiment with original negatives; use copy negatives. A Leitz Boowu is handy for making copy negatives from a print of the original negative. Make a strip of 3 to 5 identical exposures, rewind into the cassette, and then cut off this strip in the darkroom. Process thusly: (1) at the halfway point in development, flash the viewing light or overhead light on and off, exposing the half-developed strip to it fully; (2) complete development as usual; (3) fix fully and observe the result by making a print from one of the negatives. If there was enough overall reversal to suit you, then you've established your own times of development and exposure for all future attempts, and you should make a written record of the data. To observe the differences in solarization caused by varying the development point of interruption, process the other copy negatives but change the times of exposure.



Marcel Permantier

diffusion

A very sharply-focused fine-grain picture is often interesting when softened by diffusion. You can change the mood of many of your old negatives by using texture and diffusion techniques in the darkroom process. Although it is possible to combine the diffusing material with your original negative right in the carrier, a much greater range of effect is accomplished when the material is used between enlarger lens and paper. Wire screens, meshes, silk stockings, acetate sheets, and tracing paper—anything of a semi-transparent or translucent quality can be used. They may be held flat and stationary on the paper during exposure or moved rapidly back and forth—as in dodging—to produce localized texturing. A wide range of specially prepared patterns are available for this experiment, such as Kodak Bromoils, but you will have no trouble making your own screens and masks out of wire, cardboard and the materials mentioned above.



Claude Beaumont

bas-reliefs

There is a wide flexibility of mood and emphasis within the same subject material in the bas-relief technique. In general, this produces a minted (as in coins) look, and can be the most dramatic of all treatments for your old negatives as well as new ones. Procedure is thus: Make a direct contact exposure of your basic negative on slow film using a contact printer such as the Eldia. Proper exposure is not difficult to establish. Develop the contact negative—which appears, of course, as a positive,—and dry thoroughly. Place the two negatives together in the enlarger, minutely offset from each other and between glass if you prefer extremely close control of line separations. Hinged double glass plates are available for Valoy II and Focomat enlargers. Exposure has wide latitude, since you are not seeking the same tone range as in a standard print. A Kodak Bromoil was used with bas-relief at right.

new products shown at Photokina

introducing: the M2, Braun Hobby units, lenses, Visoflex

the M 2 story / "wide-angle Leica" with unique features / Ralph Carroll

Ever since the Model A was introduced in 1924, the professional photographer and the Leica have exerted a very profound influence upon each other's development. The most recent evidence of this interaction is the brand-new M 2 Leica, a pro's camera from baseplate to accessory shoe. To understand the thinking behind the M 2, it is first necessary to know a few things about the photographers whose working methods played the decisive role in its design.

The professional photojournalist has been defined as a man with seven cameras and a working wife, but this probably involves an element of exaggeration. The average professional Leicaman almost always works with a minimum of two camera bodies, and the joint use of three is far from uncommon. His basic optical outfit consists of three focal lengths: the 35mm wide-angle, the 50mm normal focus, and the 90mm long-focus lenses.

the handy wide-angle

The 35 is particularly handy under cramped conditions when it's necessary to relate subjects to their surroundings. For tightly cropped pictures, when the requirement is to isolate subjects and to simplify picture content, there's nothing like a 90. Between these include-more and crop-tight assignments, the 50 is the Leicaman's most versatile weapon. The pro, of course, also employs a wide variety of additional focal lengths, but these are specialists. On most of his assignments, most of his pictures are the work of the basic 35-50-90 team.

At Photokina 1954, professionals found most of their needs met by a completely new sort of Leica, the M 3. Overnight the M 3 became a professional mainstay, and more pros today use this camera than any other currently produced high-grade miniature.

M 3 and M 2 compared

Let us now run through the principal features which account for the M 3's tremendous professional acceptance, comparing each in turn with the new M 2.

(1) The first reason for the M 3's acclaim probably was its brilliant rangefinder (combined with its viewfinder system through a single eyepiece). This makes accurate focus not merely possible, but amazingly easy —under even the worst "available-darkness" condi-

tions. This outstanding rangefinder has been continued in the M 2, with the addition of two depth-of-field check tabs, for f/5.6 and f/16. *(See illustration below)*

(2) Next comes the unique M 3 viewfinder system in which specially illuminated focal frames for the 50, 90, and 135mm lenses appear automatically as soon as the appropriate bayonet-mounted Leica lens is locked into the M 3's rugged quick-switch lens mount. Later, this 50-90-135 bright-field framing was extended to the 35mm focal length via the "RF" Summaron which positions special optical "minifying" elements over the M 3's range- and viewfinder windows to convert its 50mm frame lines to the 35mm wide-angle field of view.

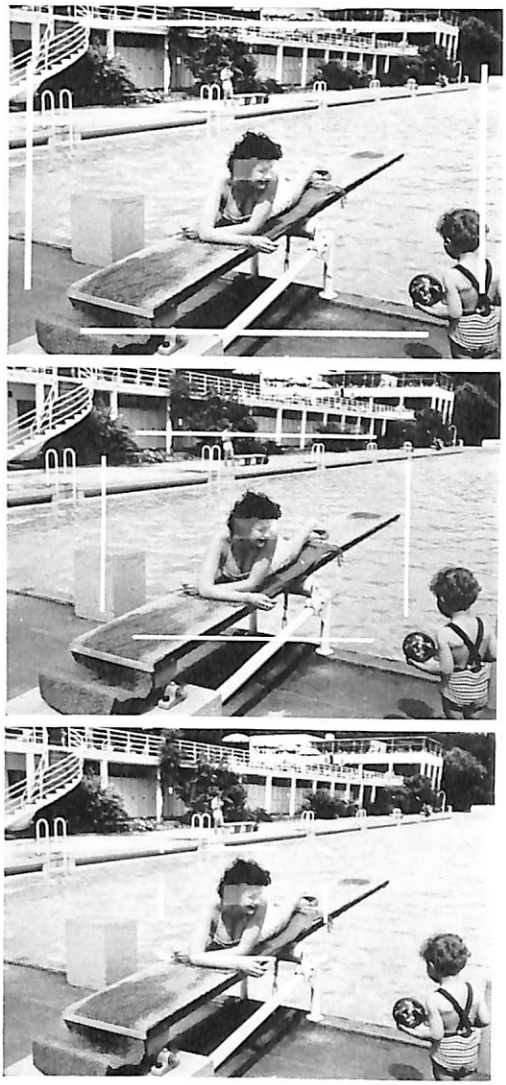
35-50-90 emerges

The M 3 was a great step forward. But a lot of photographers rarely, if ever, needed the 135mm frame. They preferred a built-in 35mm frame that would not require the Optical Viewing Unit of the "RF" Summaron. The M 2 gives it to them. Changing the viewfinder's image size to .75X (compared to the M 3's .90X) permitted a 35-50-90mm frame combination. At this image ratio, a 135mm frame would be impractically small for accurate work. But wide-anglers lose little by its absence.

(3) Third on our list of features which make the M 3 popular is automatic and continuous parallax correction. Its mechanism, through a linkage with the rangefinder, causes the M 3's focal frames to slide diagonally within the image field to eliminate framing errors at all focusing distances. *(The Dual-Range Summicron's Optical Viewing Unit extends automatic parallax correction down to 19 inches!)*

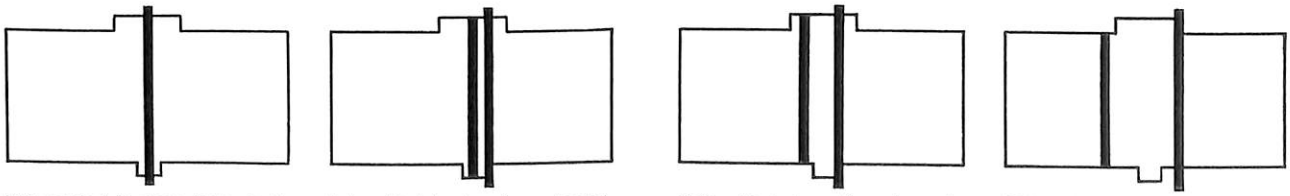
a first for the M 2

The same automatic parallax correction is incorporated into the M 2, accommodating, for the first time in any interchangeable lens camera (except for the M 3 with "RF" Summaron), the 35mm focal frame in addition to the 50mm and 90mm frames.



TOP TO BOTTOM: The M 2's 35mm frame; 50mm frame; 90mm frame. All compensate for parallax.

(4) Another standout M 3 feature is its surprisingly quiet focal-plane shutter which provides all speeds from 1 to 1/1000 second. The M 2 has the same shutter and the same speed selector dial. The dial does not rotate as film is advanced. This means speed can be changed before or after advancing film. The dial is slotted to accept the Leica-Meters "M," and "MC"—another big M 3 plus which has been extended into the M 2 design. Automatic flash synchronization for both conventional and electronic flash is built into both the M 3 and M 2.



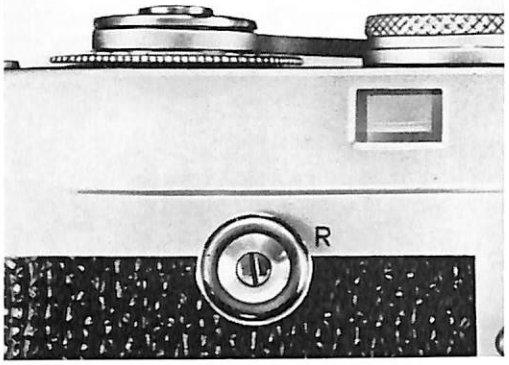
Main subject in sharp focus. In illustrations at right, secondary subject is shorter line.

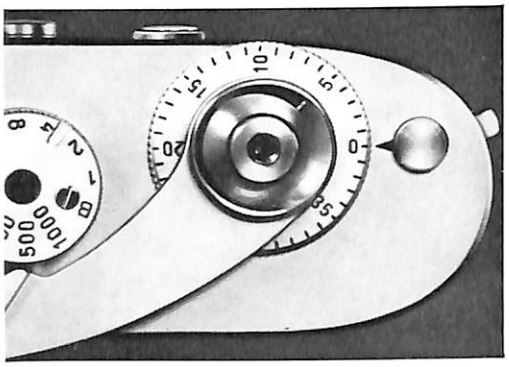
Main subject in sharp focus. Secondary subject is also sharp at either f/16 or f/5.6.

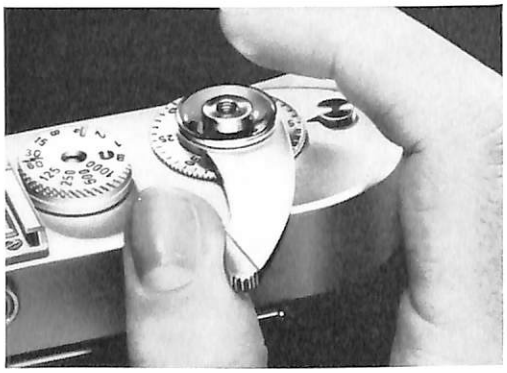
Main subject sharp. Secondary subject sharp at f/16, out of f/5.6 depth-of-field limits.

Main subject sharp. Secondary subject outside depth of field at both f/5.6 and f/16.

UNIQUE DEPTH OF FIELD INDICATOR in M 2 viewfinder-rangefinder. Rectangles above represent rangefinder at center of M 2 viewing unit. The M 2 rangefinder has a projection at top which is a "depth-of-sharpness" guide for 50mm lenses set at f/16 and a smaller projection at the bottom, sharpness guide for 50mm lenses set at f/5.6. Everything not in the plane of focus shows as a double image in rangefinder. If the width of separation of double images of a secondary subject falls within the large "tab," the double-imaged subject will be sharp at f/16; within the small "tab," sharp at f/5.6.







TOP TO BOTTOM: Release button for rewind; manually-set frame counter; advance lever, worked by one stroke or several.

unique advance lever

(5) The extremely smooth operating M 3 advance lever was a great source of M 3 enthusiasm. It operates with so little camera jar that you can actually maintain subject framing, and even refocus while operating the advance mechanism. In the M 2, the advance lever operates either with one long (about 110 degrees) or with two or more shorter strokes, and the camera has been constructed to accept both Leicavit and motor-drive baseplate accessories. The M 2 Leicavit is not yet available but should be by some time in 1959; the electric motor drive unit for sequence photography will take a bit longer.

(6) Last of the M 3 features is the flip-open back which facilitates quicker loading, swings out to expose the film gate and pressure plate for occasionally-needed cleanings. Built into the back is a film reminder dial. The flip-open back is an exclusive of the M-cameras and is an integral part of the M 2 body design.

economy in the M 2

To most pros, and many active amateurs, a Leica outfit means a minimum of two and often three bodies. So, to keep costs down on the new M 2 without giving up any essential features of the M 3 or relaxing perfectionist standards of workmanship, Leitz had just one path open: eliminate in the M 2 every M 3 feature that wasn't absolutely essential. Analysis revealed only three features that the designers would consider scrapping—these are:

(1) The automatically resetting frame counter. Instead of this the M 2 has a manually-set counter that is concentric with the M 2 release button.

(2) The built-in self-timer. The M 2 has none.

(3) The advance/rewind lever of the M 3 has been changed in the M 2 to a simple push-button device.

Another item appears on the M 2 as a sort of bonus feature. Although not absolutely essential, the focal pre-selector switch on the M 3 is a great convenience to many. It is carried over to the M 2 for previewing of the subject through the frames for the 35mm, 50mm, and 90mm frames.

new Braun Hobby electronic flash units unveiled/redesigned with advanced innovations/Albert Ward

The brand-new family of four Braun Hobby electronic flash units has been announced, with valuable improvements both inside and out—including two exclusive and important "firsts" in the field:
(1) A long-lived, rechargeable barium battery that eliminates possibility of permanent damage if recharging is neglected—even for six months at a time.
(2) A unique electronic circuit which combines the advantages of an electrical vibrator with those of that much-discussed new development in the speedlight field—the electronic transistor.

The names of the units are unchanged (except for model identification letters), and they continue to give the same light output. The medium-power "Standard EF 1" has a Kodachrome guide number of 36, the powerful "Special EF 2" and "Special EF 2 NC" (the NC is powered by a built-in nickel-cadmium battery instead of the barium unit) have a Kodachrome guide number of 44, and the powerful 135-watt-second "Automatic EF 3" boasts a hefty 55.

The "Standard" and both "Specials" are now housed in handsome cases of gray shock-resistant Polystyrol plastic. And there's a new flash head design with a tiny 2x3½ inch reflector whose remarkable performance we will discuss in a moment. The flash head is equipped with an accessory shoe which mounts directly on the camera. The "Standard" has an accessory shoe right on the case for easy carrying of the head, while the "Specials" come with a light plastic handle and mounting bracket. This gives you the option of mounting the head directly on the camera in the accessory shoe or beside the camera via the familiar bracket and handle arrangement.

The "Automatic" retains all of its versatile features, such as variable-beam reflector, half-power switch, and push-button controls, and to these are added the "Barix" barium battery and new vibrator/transistor circuit, in the unbreakable black plastic Polyamid case of the previous "Automatic."

All four models now have built-in provision for operating on A. C. with simultaneous battery recharge. A rotary switch adjusts to a wide range of A. C. line voltages—115, 130, 160, 225, and 250—and a second plug permits operation (by way of a separately available cord) from the cigarette lighter of either 6- or 12-volt automobiles, practically insuring access to recharging facilities anywhere in the world.

Braun Hobby Standard EF 1

Braun Hobby Special EF 2

unique power circuit

With a remarkable transistorized voltage monitoring circuit in both models of the "Special" and in the "Automatic" (but not in the "Standard"), Braun overcomes the vibrator's big drawback—the continued high drain on the battery just as long as the unit is on—while keeping the fast, dependable recycling characteristics of the vibrator.

The monitoring circuit continually measures the charge stored in the condenser. When the unit is flashed, emptying the condenser, the vibrator, as usual, builds the charge back up. When the proper working level is reached, the monitor promptly shuts off the vibrator. With the vibrator off, drain on the battery is practically nil. Until the next flash, the monitor maintains the charge right at the working level by switching the vibrator back on for a fraction of a second whenever the charge drops a little. Result: Waiting time between flashes is no longer a major factor in the number of flashes that can be extracted from a battery charge.

Another very attractive advantage results from the monitor circuit: Light output remains uniform from the very first flash to the last on a battery charge.

With conventional nonmonitor circuits, light out-

◀ **Leica M 2** with 35mm lens and new Braun Hobby flash head in accessory shoe. Flash efficiently covers wide-angle area of lens.

BRAUN HOBBY SPECIFICATIONS

		Automatic EF3		Special EF2 and Special EF2NC	Standard EF1
Case Dimensions		9"x6⅝"x3"		6¾"x5¼"x2⅛"	6¾"x5¼"x2⅛"
Total weight (with battery)		6 lbs. 7 oz.		Special EF2 4 lbs. Special EF2NC 4 lbs. 3 oz.	3 lbs. 9 oz.
Flash duration		1/1000 sec.		1/1000 sec.	1/1000 sec.
Color temperature		5600°K. (matches daylight color film balance)		5600°K. (matches daylight color film balance)	5600°K. (matches daylight color film balance)
Watt seconds		Full-power position 135	Half-power position 60	70	50
Reflector Coverage		Adjustable Choice of 50° or 70°		60°	60°
Guide Number	Daylight Kodachrome	55*	open lens 1½ stops	44	36
	Daylight Anscochrome or Ektachrome	90*	open lens 1½ stops	70	60
	Daylight Super Anscochrome	160*	open lens 1½ stops	120	105
	ASA 100 Black-and-white	300*	open lens 1½ stops	230	180
Number of Flashes	A.C.	Unlimited	Unlimited	Unlimited	Unlimited
	Barix battery	80	180	75	120
	Nickel-cadmium battery	—	—	75	—
Recycle Time	110 volts A.C.	8-9 sec.	2-3 sec.	5-7 sec.	5-7 sec.
	Battery	9 sec.	3-4 sec.	6-7 sec.	5-6 sec.
Extension flash head available		Yes		Yes	No
Battery charger		Built in		Built in	Built in

*Guide number for two-position reflector on "Automatic" set for 50° beam. Open lens ½ stop for reflector in 70° beam position.

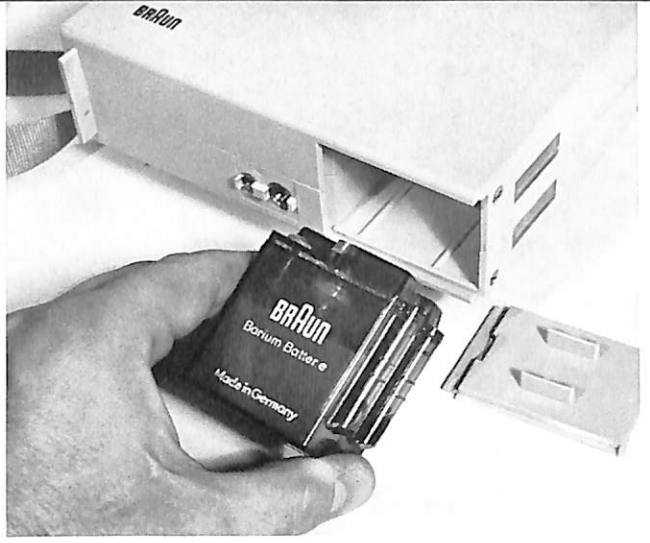
put starts off quite high with the first few flashes from a fresh battery, then falls off as the battery's energy is used up and voltage drops. With the monitor circuit, light is always held within a close tolerance. (The on-off-on monitor system does permit a very small variation in light output from flash to flash, but this is so small as to be unnoticeable in terms of working exposure, never more than one-fifth stop with any of the units I tested.)

Also, as a by-product of the monitor cut-off, recycling time is kept short over the entire battery charge. Recycling time hardly more than doubles from the first to the last flash.

new reflector design

The new bar-shaped flash head on the "Standard" and the two "Specials" has a face only half the size of the two-way flash head on the "Automatic." Inside it is a deep V-shaped reflector housing a straight, pencil-like flash tube.

Extensive measurements of the flash pattern from the tiny head proved it to be unusually efficient, with no undesirable characteristics such as sharp fall-off at the edges of the light pattern. The pattern, interestingly enough, is roughly rectangular in shape. Evenness of illumination is absolutely superior to that of any other portable speedlight we have ever seen. Light intensity over the field of a 50mm lens is completely uniform, with no practical fall-off at the corners. Coverage is excellent even for use with a 35mm wide-angle lens.

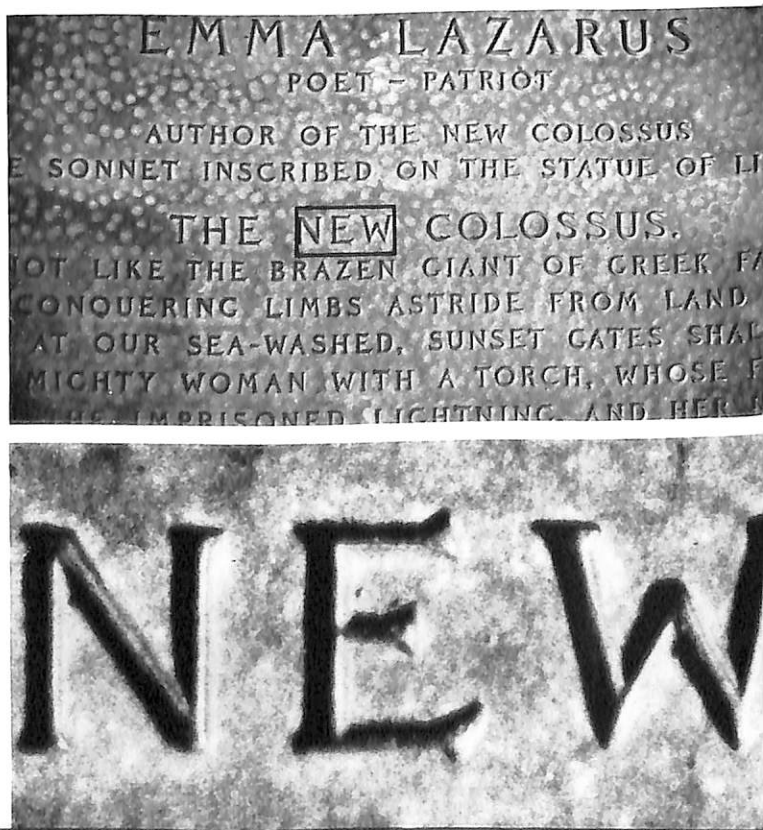


"Barix" barium battery

The highly efficient "Barix" offers an unprecedented combination of rechargeable-battery features; the fool-proof recharge characteristics of the nickel-cadmium with the low cost and convenience of built-in charge condition indicators of the old established lead-acid battery.

Important to present owners of Braun Hobby units is the fact that the "Barix" is interchangeable with the lead-acid battery supplied with previous units. The "Barix" is unhurt by occasional overcharging and can be stored in discharged condition without any worry about damage for as long as six months. Since it is small, light and inexpensive, the new barium battery will be very useful to users who shoot many flashes without being able to recharge. They can carry along several of the new batteries and easily change them on location.

Tests performed by this writer proved the guide numbers supplied by the manufacturer to be dependable, and battery life and recycling times to be commendably on the conservative side. Prices are: "Standard EF 1," $59.50; "Special EF 2," $79.50; "Special EF 2 NC," $109.50; and "Automatic EF 3," $109.50.



new Leitz lenses also introduced at Photokina / lens for "f/2 team," superwide-angle 21mm, Visoflex II

35mm f/2 lens completes Summicron team

The welcome appearance of the 35mm Summicron f/2 wide-angle lens completes the professional "team" about which Ralph Carroll speaks earlier in this section. This 35mm lens, the 50mm Dual-Range Summicron, and the 90mm Summicron, form an f/2 Summicron lens group. Now, with this group and either an M 3 or an M 2, the Leica user is set to cover almost any photo situation with more ease than was ever possible before. Since each lens has the same maximum aperture, there is no need to calculate new shutter speeds when switching focal lengths, as was often the case when wide-angle and long-focus lenses were slower than the 50mm lens.

special Leitz glass

Naturally, the formula of the new wide-angle Summicron takes full advantage of the new "rare earth" glasses. But for the first time in Leitz history, the factory's own glass research was applied in designing the new lens. As a result, one of the glass lens elements is of a special "Leitz" glass, developed (but *not manufactured)* by the factory itself.

It took eight glass elements to solve the design problems of this high-speed, wide-angle lens that has edge-to-edge sharpness and resolution when wide open. This compares to six for the 90mm Summicron f/2 and seven for the 50mm. And the result is a lens whose performance "wide open" compares to that of its famous 50mm namesake—which professionals call the "sharpest f/2 in the business." Peak aperture for sharpness is about f/4 to f/5.6. The short focal length and high speed of the 35mm make it ideal for zone-focus shooting and work by existing light in close quarters. It goes without saying that the high speed will be welcomed by color workers.

Resolving Power of 35mm Summicron at f/2. At top is photograph from part of negative. At bottom is section of 20x30-inch full frame enlargement.

Improved mount

Equally newsworthy are some of the new features on the lens mount. The diaphragm scale is linear. That is, the aperture click-stops are equally spaced; there is no crowding toward the f/16 end of the dial. This makes it easy to set half-stops for critical color work. The infinity lock and focusing lever are redesigned completely. As the picture shows, the lever is now large, with nonskid grooves that make it easy to handle between thumb and finger.

Initially, the new Summicron 35mm will be available in bayonet mount for the M 2 and M 3 (the latter with Optical Viewing Unit). In 1959, a screw-mounting version will be produced. Price, in M 2 mount is $174.00; in M 3 mount, $207.00, both including tax.

21mm Super-Angulon f/4 has superwide angle

One of the most interesting of the new lenses announced by Leitz at this year's Photokina is a 21mm superwide-angle lens whose speed is f/4. Minimum aperture is f/22; the linear diaphragm scale has click-stops. The Super-Angulon, as the new lens is called, has an acceptance angle of 92°—about twice that of the standard 50mm lens. Like all Leitz wide-angle lenses the 21mm lens couples to the camera rangefinder. But, a special accessory Optical Bright-Line Viewfinder is needed.

While the average photographer will not find use for a 21mm lens on every photo trip, the Super-Angulon is extremely handy to have when the situation calls for it. For architectural and close-quarters photography, for emphasizing space and distance, for special perspective effects—the 21mm is unsurpassed. It will make pictures which are literally impossible for other lenses. And its truly astonishing depth of field permits focus-free shooting which simplifies picture-taking under stress.

The 21mm Super-Angulon is available in both screw-mount for IIIg and earlier Leicas, and bayonet-mount for "M"-model Leicas. In either mount, the cost is $240.00, including tax. Optical Viewfinder for 21mm lens is $28.50. A special lens hood is $4.50.

new products *(contd.)*

35mm Summaron f/2.8 now available

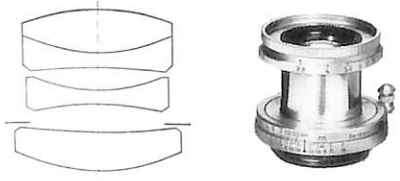
The 35mm Summaron f/3.5 wide-angle lens has always been in demand because of its brilliance, depth of field and over-all sharpness at full aperture. It is a professional standby for covering fast-breaking picture stories, for "candid" photography where zone-focusing is most convenient and for pictures calling for foreground emphasis.

Now a new model Summaron, with all the advantages of the original, offers a top-speed of f/2.8—some 50 per cent greater than the f/3.5 speed of the earlier lens. The f/2.8 model is a six-element symmetrical derivative, and takes advantage of new highly refractive lanthanum glasses in its design. By increasing the diameter of the front lens elements beyond the size called for by the f/2.8 aperture, designers have virtually eliminated vignetting. Performance at full aperture is excellent; optimum aperture is f/5.6.

Like the other new Leitz lenses, it has a linear diaphragm scale and click-stops. The f/2.8 Summaron, not scheduled for delivery until early 1959, will be available in screw-mount as well as in bayonet-mounts for the M 2 and M 3. The latter will include an Optical Viewing Unit.

35mm Summaron f/3.5 for M 2

The f/3.5 model of the 35mm Summaron continues to be available for both screw-and bayonet-mounting Leicas. A model in a mount for use on the Leica M 2 was announced at Photokina. It requires no Optical Viewing Unit, since the 35mm field is outlined by the M 2's finder. Price is $82.50, including tax.



bayonet-mount 50mm Elmar f/2.8

Another of the lenses announced was a bayonet-mount version of the popular 50mm Elmar f/2.8. Thus, the Elmar formula, famous since early Leica days, becomes available in increased speed and mounted expressly for M 3 and M 2 models. Like the screw-mount model, the bayonet 50mm f/2.8 Elmar is collapsible and has a click-stop diaphragm. It does not replace the f/3.5 model, which is still available in both screw- and bayonet-mounts. Price of the bayonet f/2.8 Elmar is $60.00, including tax.

FACTS ABOUT THE NEW LENSES

	21mm Super Angulon	35mm Summicron	35mm Summaron	50mm Elmar
Type	Superwide-Angle	Wide-Angle	Wide-Angle	Normal
Elements	9	8	6	4
Maximum Aperture	f/4	f/2	f/2.8 or f/3.5	f/2.8
Minimum Aperture	f/22	f/16	f/22	f/16
Angle of View	92°	64°	64°	45°
Mount Type	Rigid	Rigid*	Rigid*	Collapsible
Linear Diaphragm Scale	Yes	Yes	Yes	No
Click Stops	Yes	Yes	Yes	Yes
Couples to	Rangefinder	Rangefinder	Rangefinder	Rangefinder
Front Flange Diameter	42mm	42mm	42mm	42mm
Weight	9 oz.	8¼ oz. in M 3 mount*	5 oz.†	7½ oz.

*Mount for M 3 includes Optical Viewing Unit. †f/2.8 model in M 2 mount.

Visoflex II to accept 90mm lenses

A completely redesigned reflex-focusing housing—the Visoflex II—is another interesting newcomer to the Leica System. Since it is considerably shallower, front to back, than the former Visoflex, the II will permit properly mounted 90mm lenses to focus from infinity down to 3½ feet.

single release

A single rigid arm on the Visoflex II releases both its mirror and the camera shutter; adjustment of the time-lag between mirror release and shutter release is made very simply via a knurled ring.

Two magnifiers will be available—one (4X) for eye-level use, a second (5X) for convenience when the camera is held below eye level.

The Visoflex II will be produced in both screw- and bayonet-mount models to fit all Leica models with interchangeable lenses. Adapter rings will be available so that lenses from 90mm to 400mm focal length can be used with the new Visoflex II. Prices and availability will be announced later.

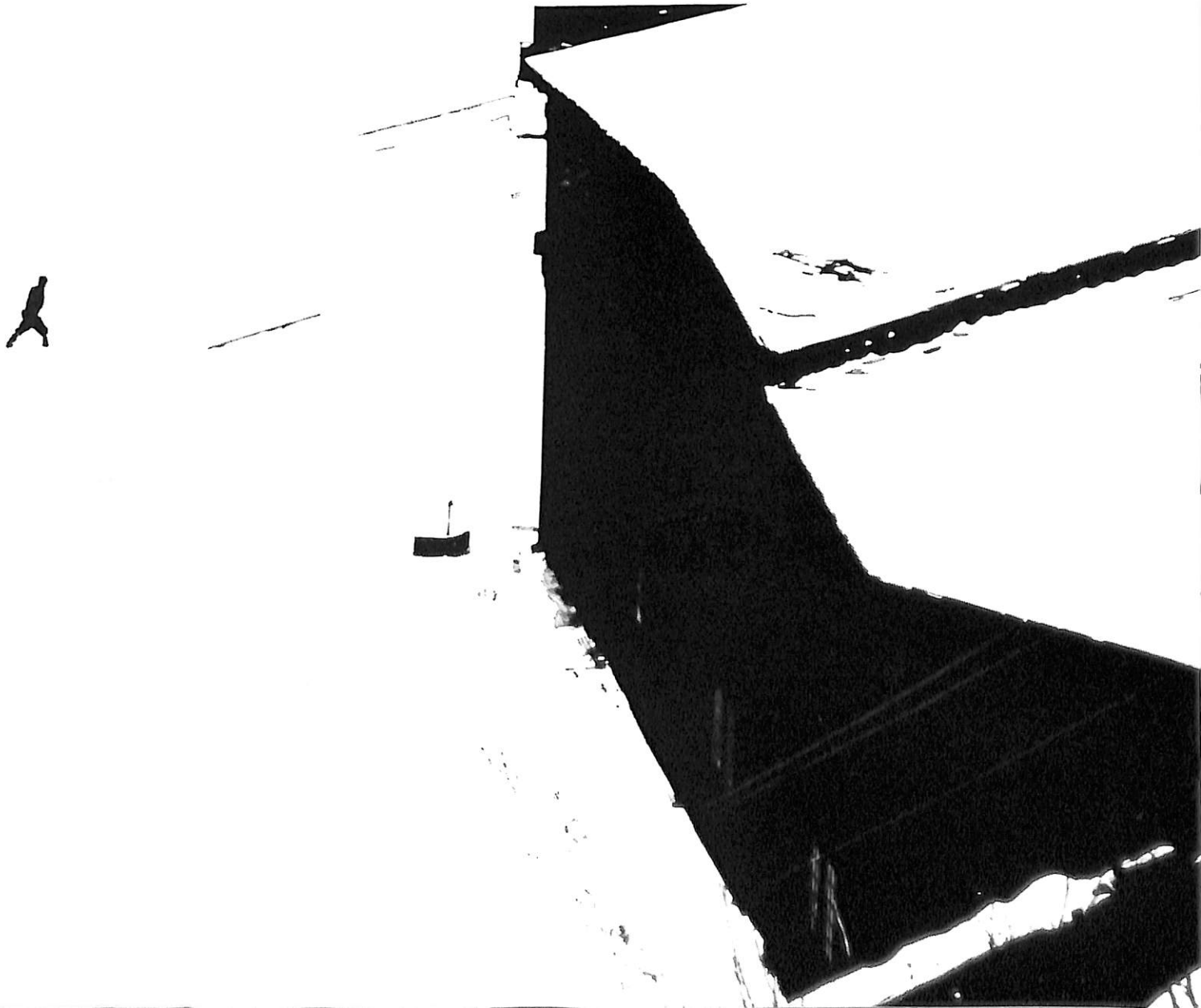
a memory's-eye view of winter / *photographs by George Harvan*

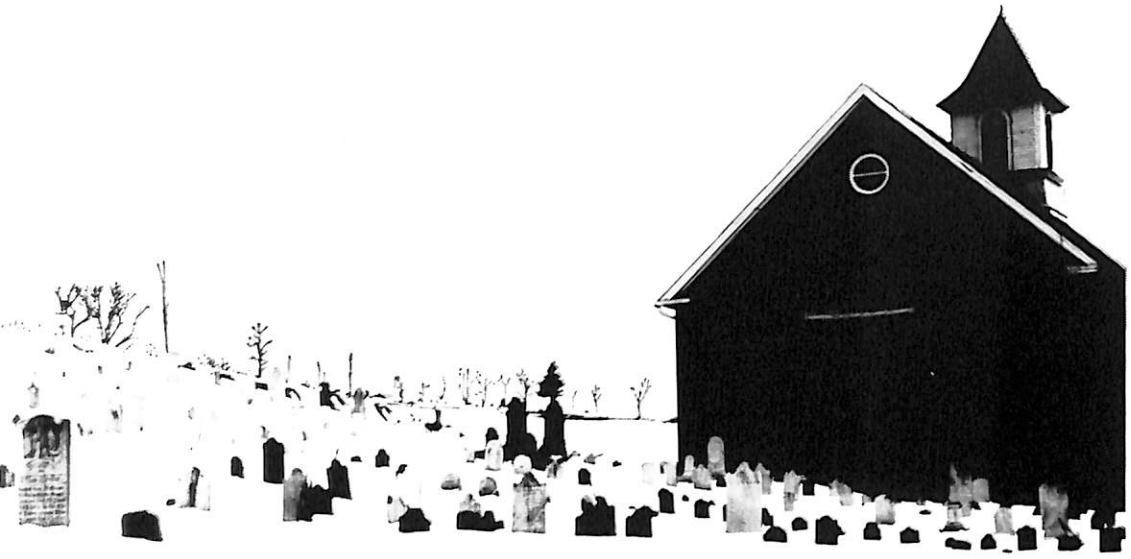
poetic scenes achieved through simple technique

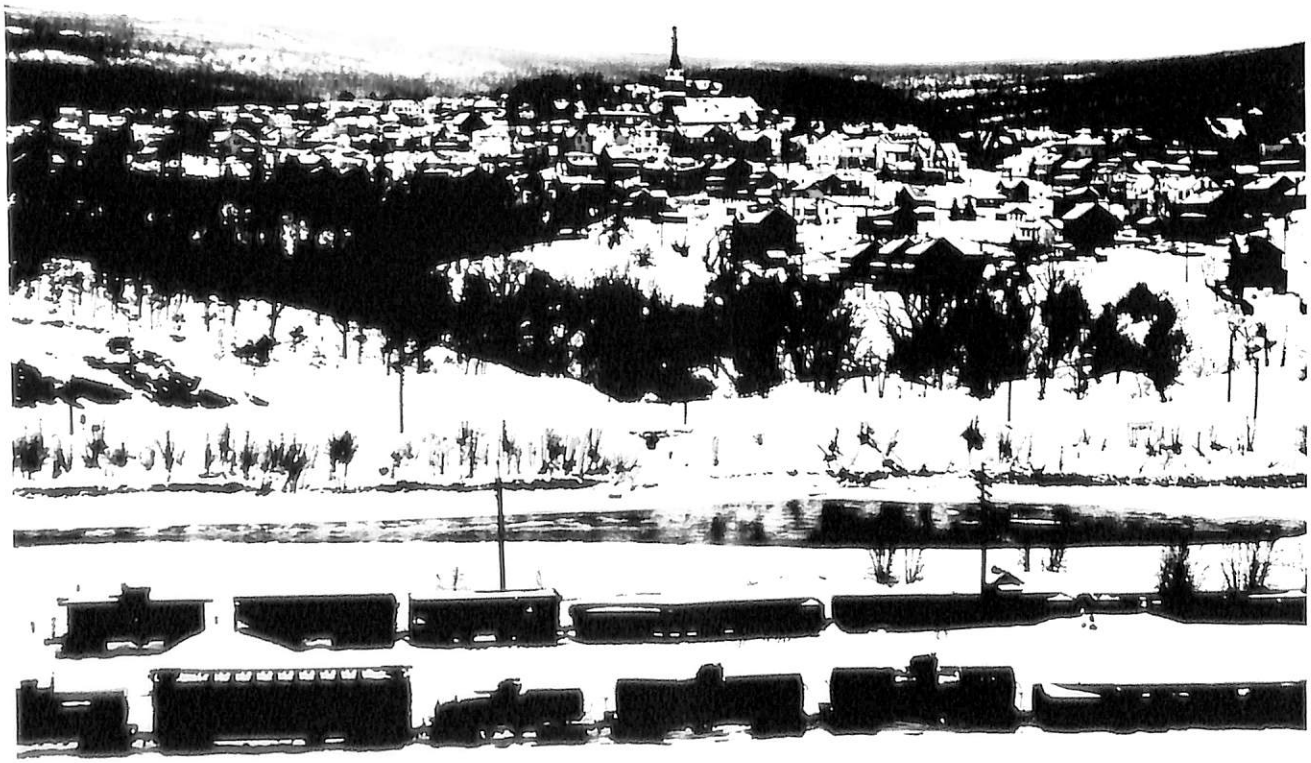
The pictures in this section resulted when George Harvan of Lansford, Pennsylvania, set out to visualize his memories of boyhood winters. The winter of youth is a clean, bright time, a black-and-white world without the maculate grayness of slush.

To achieve his startling, two-tone pictures, Harvan chose scenes in which the subject matter was outlined against the snow—usually back- or side-lighted objects. His choice of film was Kodak Micro-File, a high contrast film normally used for copying documents. By developing the Micro-File (which registers practically no middle tones) in undiluted Dektol, a paper developer, Harvan came up with just the black-and-white images he was seeking. He uses an exposure rating of 12. Sometimes, to strengthen delicate lines *(see harrow spokes, p. 21)*, he moves his enlarger lens slightly out of focus.

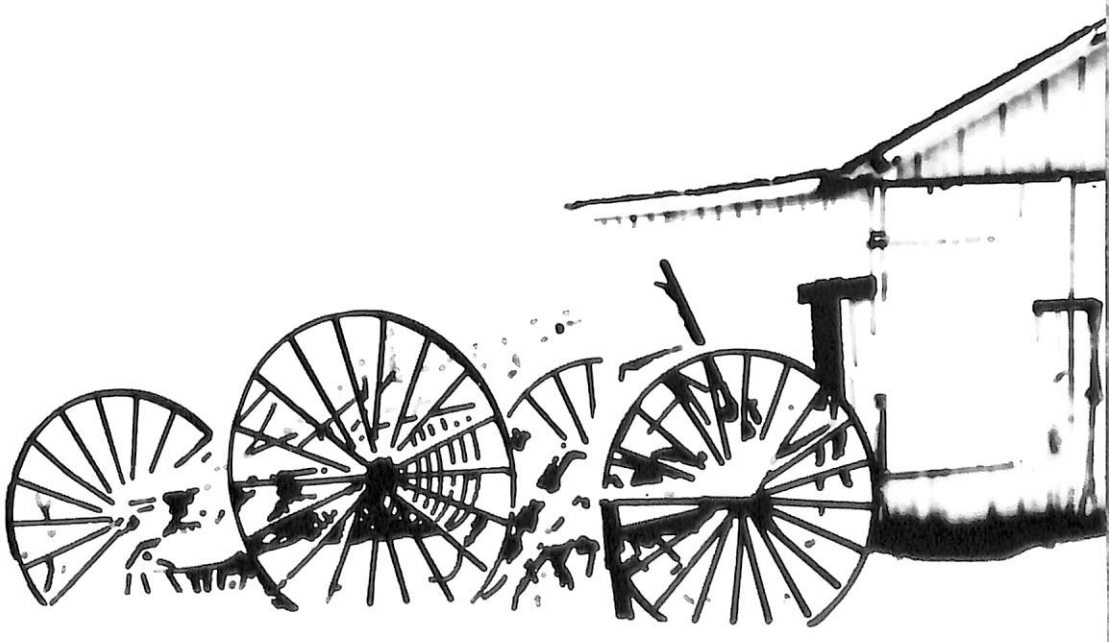
His simple technique offers a way for any photographer to picture his own winter surroundings in a different and striking way.







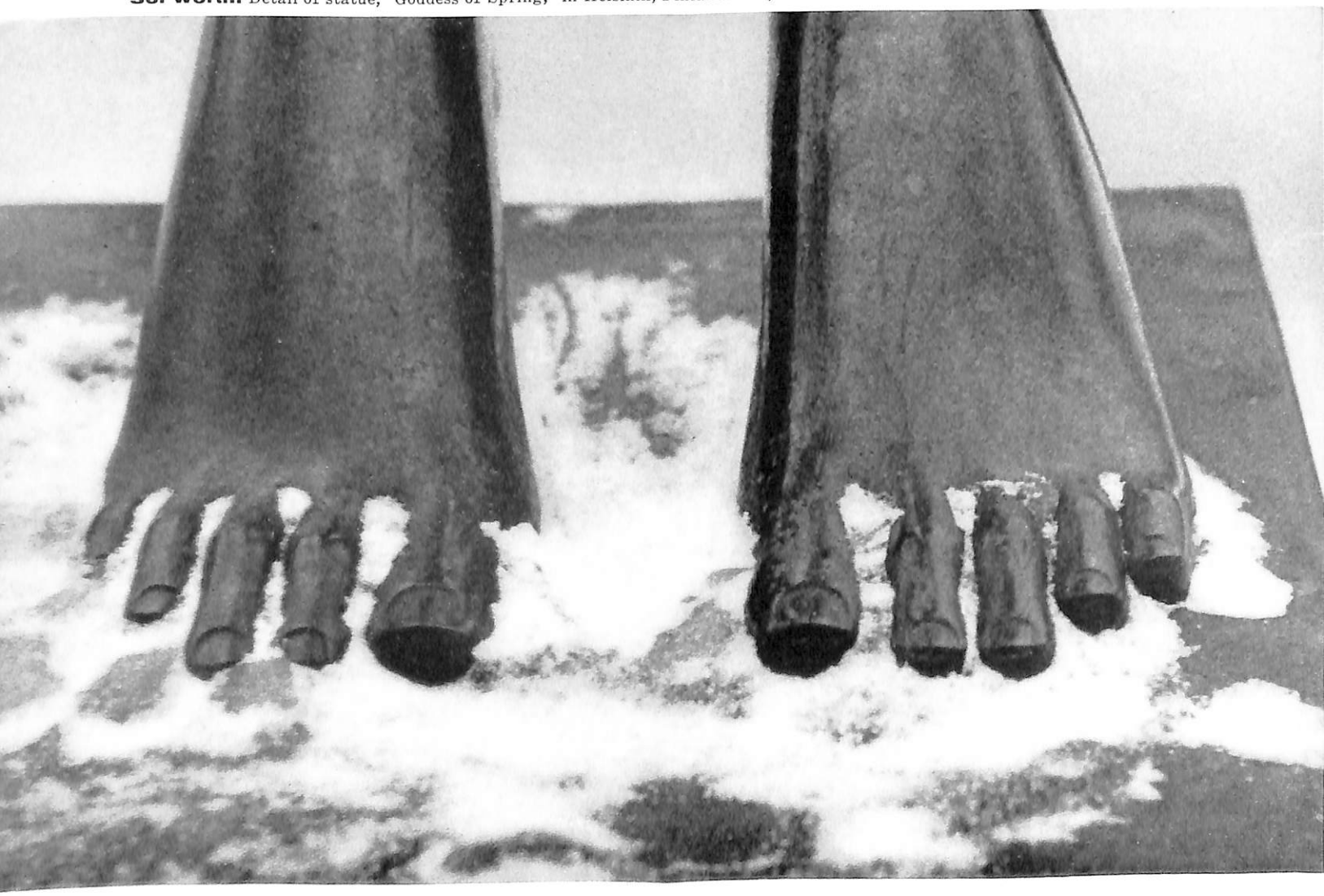
a memory's-eye view of winter *(contd.)*



Leica portfolio

Presenting four examples of the many outstanding contributions made to photography by Leica owners in all parts of the world.

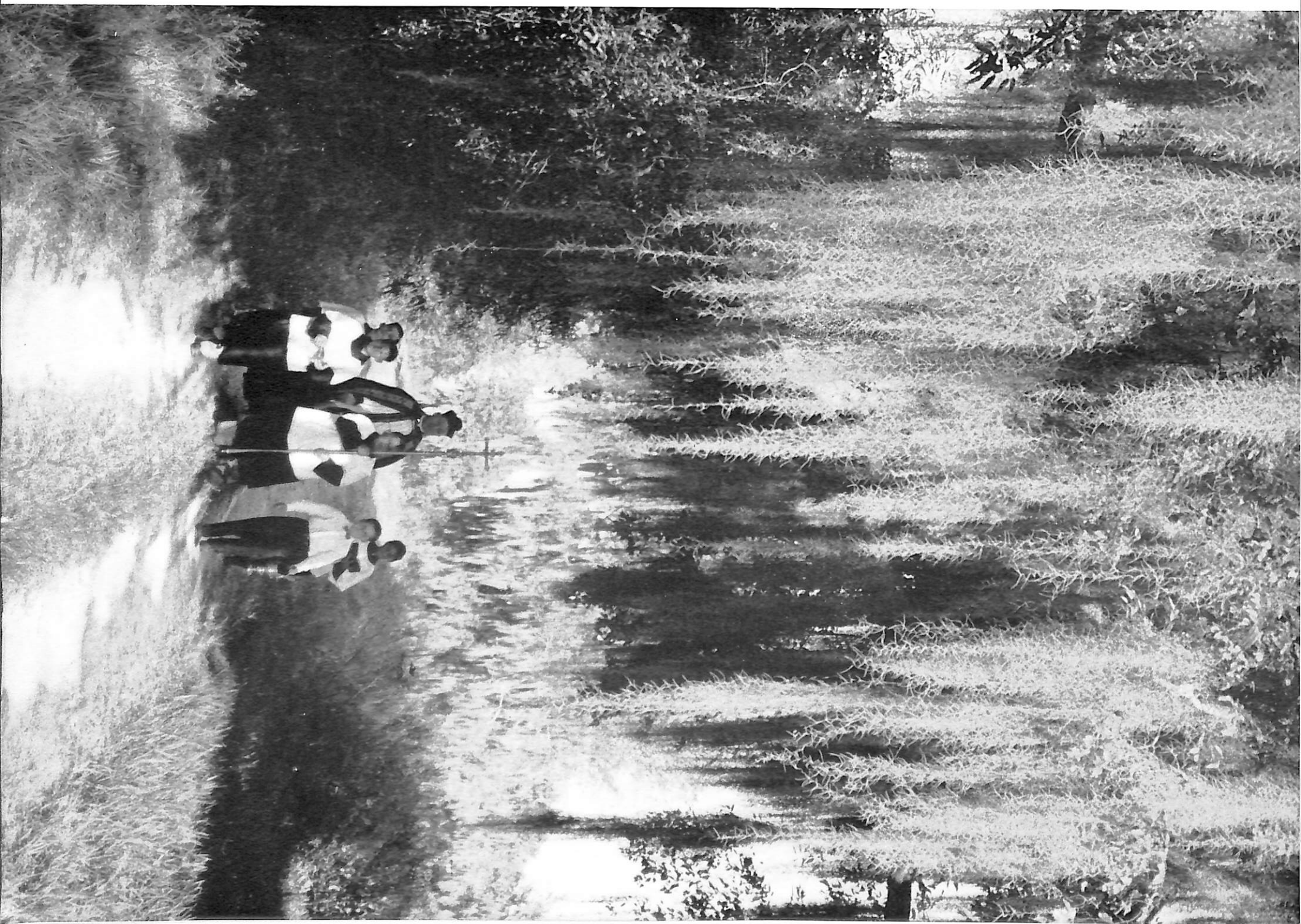
Sol Worth. Detail of statue, "Goddess of Spring," in Helsinki, Finland. IIIf, 50mm Summicron.



Arthur Schatz. Doll hospital. IIIg, 50mm Summicron.

Claude Beaumont. Snow on New York's Fifth Avenue. IIIf, 50mm Summitar.

George Moffett. *All Saints' Day procession, Louisiana bayous. M 3, 50mm Summicron.*



the fabulous laboratory of Julius Weber

a medical photographer geared for action

A short visit to Julius Weber's workshop quickly erases any notion that medical photography is a leisurely occupation. A seemingly endless array of instruments creates the atmosphere of a research laboratory: one expects to see Weber sit down and study a specimen at length through a microscope. Instead, he stands up, and studies only long enough to decide the arrangement of the specimen and take the picture.

Then, quickly, he may take the slide to another microscope, to shoot the specimen on another size film, or in color. Or he may take the Leica and Focoslide off the top of the set-up, and insert another Focoslide and camera with other film, or a bracket for a holder of cut film. He may put a live, moving specimen under a microscope and movie camera for a three-week study which will ultimately show the specimen moving only a few millimeters in a film lasting a few minutes. Or he may put a rapidly moving live specimen under microscope and Leica to photograph stills over an even longer period.

busy photographer

The phone rings and the editor of a medical magazine asks if Weber has a photo in a certain field of medicine. He either has it or promises he will arrange to shoot it. In a moment the phone rings again. He must leave the laboratory, grab one or several bags of cameras and equipment, and dash off to a hospital to shoot a record of a surgical operation. Four hospitals in the New York City area use his services for all their medical photographic documentation.

In other words, although Weber has a considerable knowledge of medicine, although he often sounds much like one of the doctors deep in research with whom he intimately works, and although his work is one of love and dedication, it is still a business. And it bustles like a business.

the equipment in the laboratory

Left and right, up and down the few short aisles, are microscope-camera combinations ready for action. Here are two research stands, close together *(see illustration)*: one for 5 x 7 or Leica with Focoslide, over a bellows and Leitz microscope; one for macrophotography, up to 30:1. Just beyond are twin Leitz microscopes for comparison shots of two specimens at once, set up for 5 x 7 or Leica. At the back is a 16mm Maurer movie camera combined with a Panphot. Underneath is a huge power unit for electronic flash in the lab. On a shelf are two portable electronic flash units. Two 4 x 5 view cameras lie on a tall picture file cabinet. Coming around from the back of the lab, we see a Leica, Micro Ibso and Ortholux microscope combined for phase photomicrography. Weber can leave this unit any length of time for study of an unstained live specimen. Next is another Leitz microscope. On the shelf which merges with Weber's desk in the lab is a quartz ultra-violet microscope.

use for dissecting microscope

Next is a low-power dissecting microscope. The head of another dissecting microscope, a Leitz low-power binocular, is at Delafield Hospital, Columbia Presbyterian Medical Center, being used on an RCA electron microscope for focusing on the fluorescent plate of the electron instrument. In the center of the room is a unique light box made for Weber with colored light tubes whose intensity can be controlled separately or together to give Weber *any color in the spectrum* either under his subject or on the subject. He uses this unit for luminescence, phosphorescence, or fluorescence, for infra-red, and for copying x-rays. Behind this is a smaller specially-made light box which takes a variety of plug-in color tube lamps. This unit with filters also gives any color for smaller subjects.

There is an aquarium in this room and also in the study on the same floor, where there is another Panphot *(see illustration)*. A third Panphot is at the Beth Israel Hospital. Cabinets abound with files of color slides and negatives. Drawers are filled with accessories. Weber keeps five Leicas active; if he needs another he can borrow his son's, or one he keeps aside to lend to friends. He has a full range of Leitz lenses from 28mm to 200mm and "every tube and bellows that Leitz makes."

surplus of equipment?

To a layman, it seems that Weber owns an overwhelming amount of equipment. Does he really need all those cameras and microscopes? Weber answers emphatically that every item "earns its keep."

Now in his forties, Weber started on his lifetime

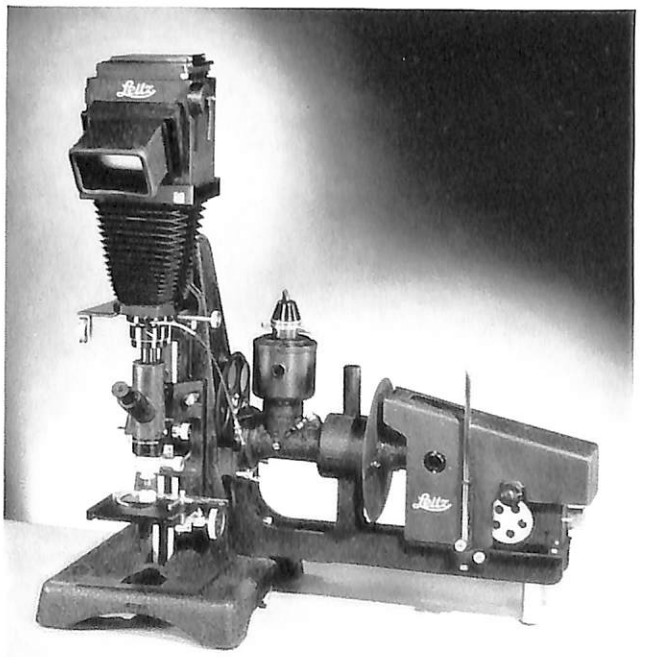
IN THE LABORATORY (above), Julius Weber inspects strips of 35mm film. At right is his unusual spectrum light box, described in the text. Against window stands a 16mm Maurer movie camera mounted on a Panphot. The camera-microscope Panphot (below) is a universal instrument for all types of optical microscopy, photomicrography and macrophotography. It operates as follows: powerful light at right goes through condenser and filter into camera-microscope stand and is directed by mirrors to illuminate specimen from above or below.

work when he was a child, spending hours and hours at the Children's Museum and the Botanic Gardens, both in Brooklyn. Mounted butterflies hang on the laboratory walls as lasting evidence of his interest in nature and entomology in those days. Weber was studying biology and mineralogy in high school when he began to use cameras. He says, "From the very beginning I was intrigued with photography at closer than three feet, the usual minimal lens distance."

seeking magnification

Then began a quest for higher and higher magnification. Weber says the most constantly recurring question in his field is, "What'll it show if you bring the magnification up a little higher?" This question even in his early school and college days was giving way to "How high can I bring it up and still keep the image optically and photographically sharp?" Then began the search for lenses to give not only higher magnification but also higher resolving power.

Weber also had another thing on his mind. "I saw very early that the photo apparatus in many hospital labs was arranged very haphazardly. It seemed to me that the best plan would be to get the most versa-



Tilting mirrors mounted above Focoslides enable Weber to focus with or without eyepiece magnifier.

tile equipment and *use* its versatility. After looking around, I decided that Leitz offered this quality.

"This was so because Leitz used a standard track for the optical apparatus in both photomicrography and macrophotography. *(The track is a metal bar on which the camera equipment rides. Track keeps camera optically aligned with the microscope.—Ed.)*

a convenient track

"I felt the riders on the Leitz track the most easily maneuvered and the most durable. I felt these riders could be arranged to take all sorts of auxiliary equipment. Besides, the track itself could be readily mounted anywhere for minimal vibration.

If I adapted my equipment to the Leitz riders, I could then move with my apparatus from one set-up to another with great rapidity and least expense. Therefore, whatever size camera I used, I adapted it to fit the track."

In 1935, the Leitz Panphot came out, and Weber immediately adapted all his photomicrographic equipment to it. Weber and other medical photographers had been operating on cumbersome horizontal arrangements. The Panphot put photomicrography on a vertical track, so the microscope could be used in its normal upright position. Weber was an innovator in using the Panphot (originally designed for mineralogy) in biology.

historic transparency

He used color film as soon as it was available, and one of his color photomicrographs of a cerebellum specimen soon appeared in an issue of *Leica Photography*. It was the first such Kodachrome published.

Weber made the first Kodachrome library of medical subjects in 1942 for the Clay-Adams company, which sells these slides all over the world. He shot thousands and thousands of subjects and says, "I did the almost impossible—wore out a Leica shutter." Today, Weber is a lecturer in the field of medical photography, and a member of many professional organizations. He is a fellow of the Biological Photographic Association, the foremost medical photographic society in the United States. He is also a fellow of the New York Microscopical Society and an associate of the Photographic Society of America. In 1955, he was made a fellow of the Royal Photographic Society of Great Britain.

the medical photographer's contribution

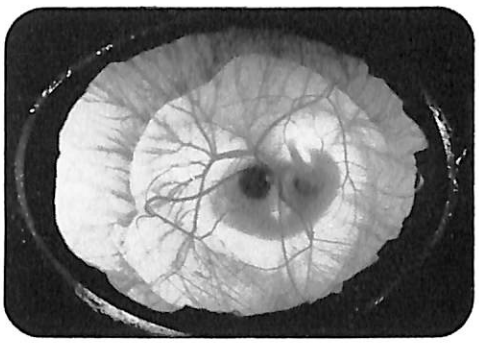
Weber says, "The importance of the medical photographer is growing constantly. Each color slide of a diseased tissue provides a text in itself. As such a file grows, a doctor can take 50 slides, each from a different case, and obtain a vast amount of information. These can be used in teaching, or comparison studies, or in studies of the effect of a particular therapy on a disease; for example, the action on tissue of various hormones, such as the corticosteroids in rheumatoid arthritis. Indeed, the information such a library offers is endless.

"And we're only discussing photomicrography, just one of the medical photographer's jobs. In clinical studies of behavior, for instance, look at what the camera can do, with the usual lenses. A camera can be set up to make a study of sleep habits, to record the number of position changes a person makes in the night. What can record it better than photography?

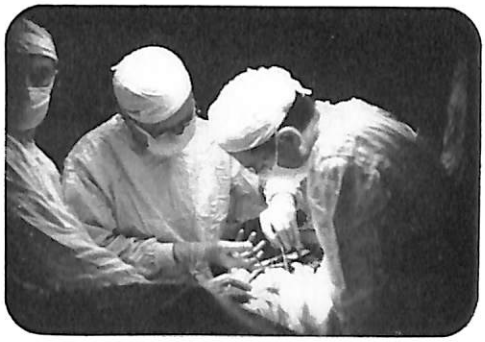
use of slides in education

"These photo files are growing and growing, and what seems routine in day-to-day shooting cannot be measured for its potential importance. Just the other day I visited a medical school where slides are used to teach basic facts of neuropathology. Four years ago the students had to learn 80 slides thoroughly. Two years ago the number was raised to 130 slides. Now they have to know 400! Changes like that are just part of the satisfaction in my work.

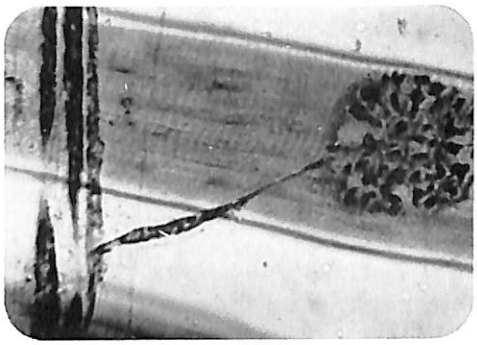
"Where does the real excitement come from? Why, when leading doctors deep in research on so many fronts in medicine bring their work to me to photograph; when I'm able to see the results of their long, arduous work. It's exciting to participate; they've struggled through three steps backward, four steps forward. I get to see the step forward."



Chick embryo.

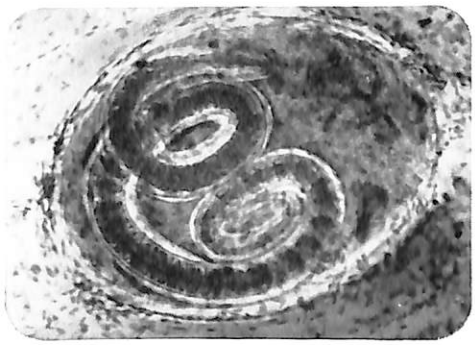


Hospital surgery.

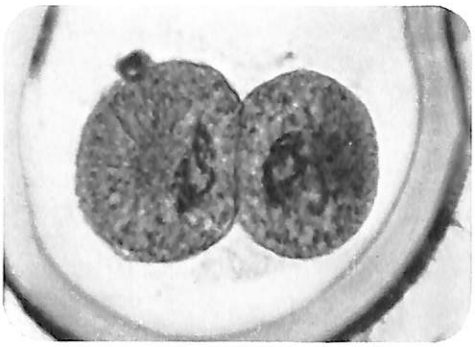


Nerve ending in muscle.

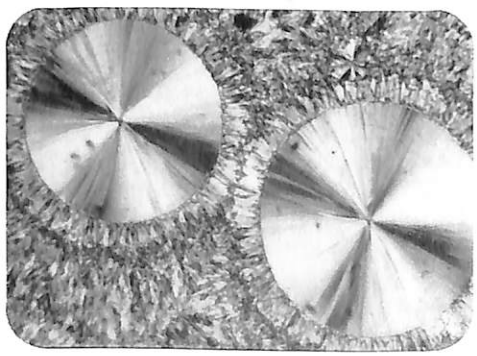
Angel fish.



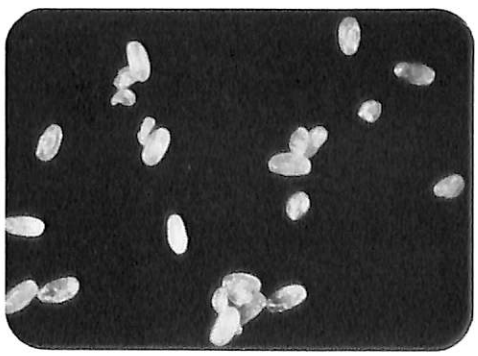
Encysted trichina.



Starfish egg dividing.



Salicene crystals.



Allergen grass pollen.

A RANDOM SAMPLING from Weber's files, these black-and-white reproductions of color transparencies show the range of his work, from photomicrography (phase, ultra-violet, black-and-white and color) to surgery room photo reports and animal, mineral and botanical studies.

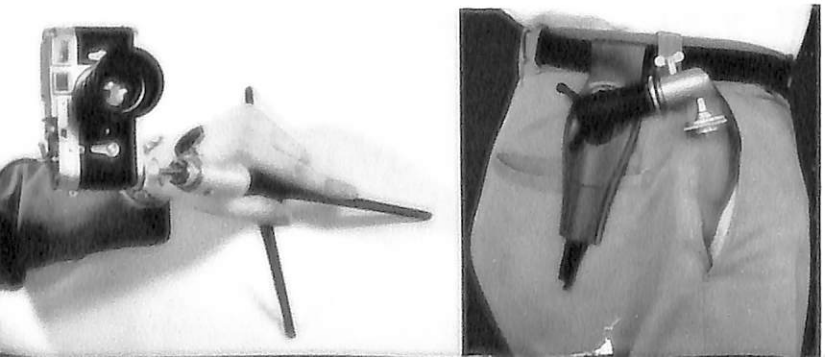
focusing on...

new Focoslide feature. On current Focoslides for both bayonet-mount and screw-mount Leicas there are two parallel lines etched exactly 10mm apart on the ground glass. They can be used to determine the image-to-object ratio of reproduction at any setting of the instrument. When the image of the lines is projected on a white surface via the projection head of the Reprovit I or II, the ratio of reproduction can easily be determined by measuring the distance between the projected lines. For instance: if the distance between the images of the lines is 100mm, the ratio of reduction would be 1:10.

for emergencies. In the heat of an exciting shooting session, have you ever cranked off 26 exposures on a 20-exposure roll? It happens! You conscientiously watched the rewind knob or shaft to be sure that it *did* rotate in a direction opposite to the arrow when you operated the winding knob or lever. What happened? You underwent the rare but painful experience of using a film which has become detached from its spool, or your extra "exposures" have pulled it loose so that you can't rewind it. But as insurance against these rare mishaps, suggests Maynard Frank Wolfe, why not carry an extra take-up spool in your gadget bag?

Then, if the film becomes detached from the cartridge spool, wind and release the shutter a few more times to be sure the entire film is on the take-up spool. Then, working in a darkroom or with a changing bag, remove exposed film, take-up spool and all, and put it in metal can or opaque paper. With your extra take-up spool and a new roll of film, you're ready again with a minimum time loss.

fastest 'pod in the east. When he sees a picture to be taken, Walter Gierasch of Andover, Mass. is not one to waste time setting up to shoot. And he finds so many uses for the small Leitz table tripod that he has rigged up a way to keep it always close at hand. The picture shows how. The "holster" is a pipe holder available from L. L. Bean, Inc. of Freeport, Maine and which can be worn on a man's belt. It also has a slit which allows suspender fanciers to attach it to the gadget bag strap.



new book. ONCE UPON A CITY, photographs by Byron, text by Grace M. Mayer. The Macmillan Company. $15.00.

This large and beautiful new book is a portrait of New York City from 1890 to 1910. From more than 10,000 prints and negatives presented by Percy C. Byron to the Museum of the City of New York, the museum's Curator of Prints, Grace M. Mayer, has selected more than 200 which distill the essence of a vanished era. To them she has added a meticulously researched text which complements the photography and completes the picture of the time.

Joseph and Percy Byron—father and son—began in 1889 to take the pictures from which the book's illustrations were selected. Percy, now 80, was only fourteen when he sold his first news picture to Arthur Brisbane.

In studying these pictures, which include scores of interiors, portraits of famous personalities, special events (a formal dinner on horseback!) it is hard for today's technically-pampered photographers to realize the skill that went into making them with primitive equipment and emulsions. We would have preferred to see them reproduced in black, rather than the brown the publisher has chosen. However, the pictures are an example and an inspiration to the hobbyist who "can't seem to find picture material." Our customs, our homes, our environment are changing even as we live with them. The straightforward documenting of our personal surroundings can, as "Once upon a City" proves, offer fascinating and valuable photographic reward.

Every photographer, collector of Americana, and New Yorker in fact or spirit will want "Once upon a City."

"Leica Fotografie" offer. Sample copies of the English edition of Europe's "Leica Fotografie," edited by Heinrich Stoeckler, are available in limited numbers at 50¢ per copy, postpaid. Write Rayelle Publications, 76 W. Chelton Avenue, Philadelphia 44, Pa.

M 3 finder tip. As you know, the Optical Viewing Unit of the 35mm "RF" Summaron lens minifies the image of the M 3 finder to show accurately the 35mm field of view. But by so doing, it minifies the field shown by the 90mm and 135mm frames as well as the 50mm frame. Nevertheless, you can still "preview" the field of the 90mm lenses via the "preview" lever. Just bring the 135mm bright-line frame into position. The compensating effect of the wide-angle Optical Viewing Unit is just enough to show the 90mm field in the 135mm frame.

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with 4-way versatility

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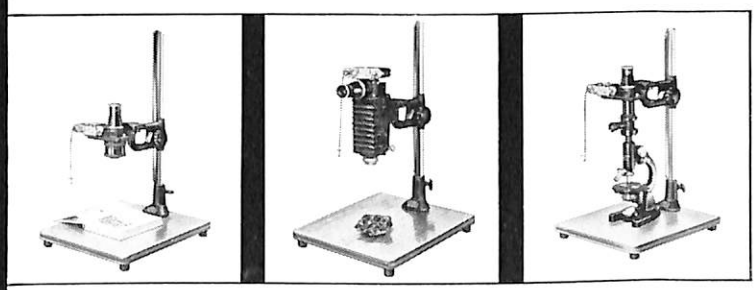
3 *MACROPHOTOGRAPHY:* LEICA with VISOFLEX and BELLOWS FOCUSING DEVICE.

4 *PHOTOMICROGRAPHY:* LEICA with FOCOSLIDE, micro-accessories and microscope.



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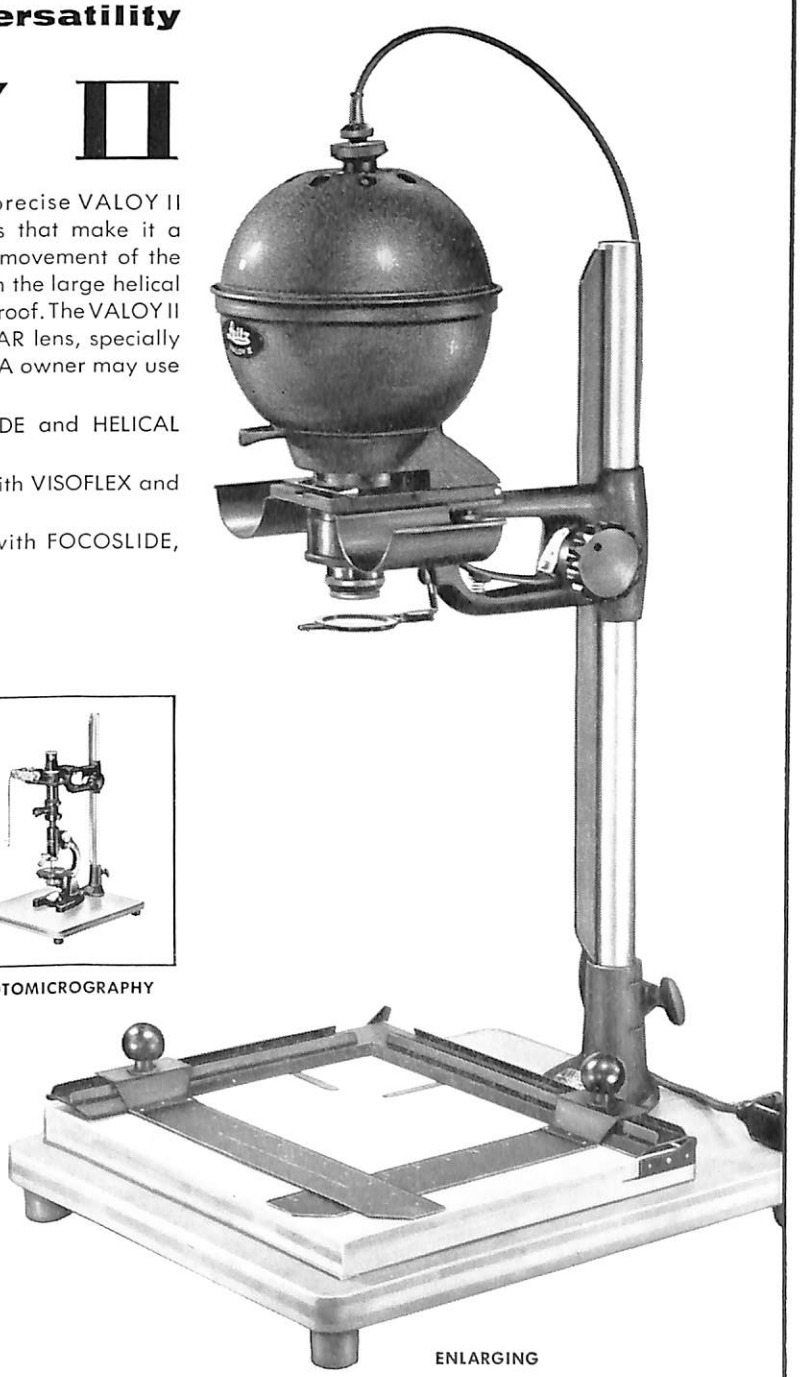

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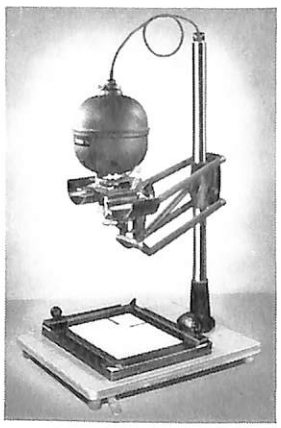

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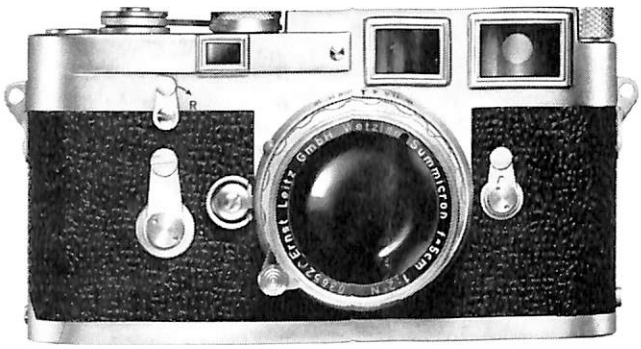
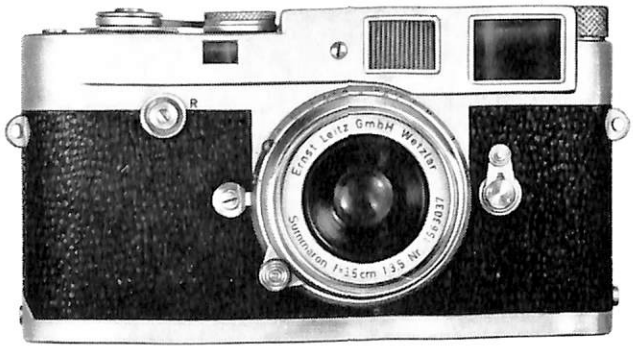
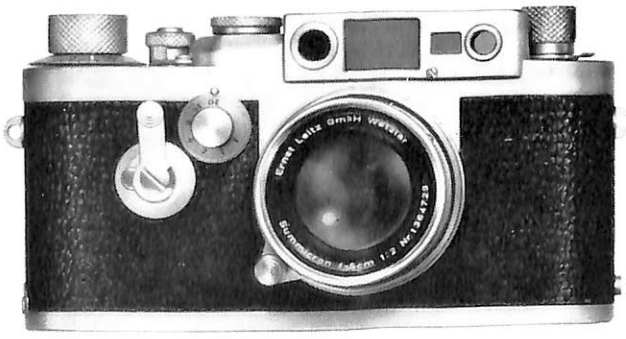


M3



M2



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